

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference JCALS-100PCT	FOR FURTHER ACTION see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No. PCT/JP2004/019271	International filing date (day/month/year) 16/12/2004	(Earliest) Priority Date (day/month/year) 22/01/2004
Applicant CALSONIC KANSEI CORPORATION		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 4 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. ☐ With regard to any nucleotide and/or amino acid sequence disclosed in the international application, see Box No. I.

2. ☐ Certain claims were found unsearchable (See Box II).

3. ☐ Unity of invention is lacking (see Box III).

4. With regard to the title,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the abstract,

☐ the text is approved as submitted by the applicant.

☒ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regard to the drawings,

- a. the figure of the drawings to be published with the abstract is Figure No. 1

☒ as suggested by the applicant.

☐ as selected by this Authority, because the applicant failed to suggest a figure.

☐ as selected by this Authority, because this figure better characterizes the invention.

- b. ☐ none of the figures is to be published with the abstract.

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International application No.

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Box No. IV Text of the abstract (Continuation of Item 5 of the first sheet)

In an air conditioning system having a variable displacement compressor (2) driven by an engine (7) of a vehicle, method and device for controlling a refrigeration cycle are provided to ensure necessary cooling performance of the system without damaging the traveling performance of the vehicle. In the method, a limit value in the discharge rate of the variable displacement compressor (2) is determined by an engine speed (12) or a variable related to the engine speed. The variable displacement compressor is controlled (9, 2a) on the basis of the limit value.

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International Application No
PCT/JP2004/019271

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 B60H1/32

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 B60H

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)
EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 1 095 804 A (KABUSHIKI KAISHA TOYOTA JIDOSHOKKI; KABUSHIKI KAISHA TOYODA JIDOSHOKKI) 2 May 2001 (2001-05-02) paragraph '0039! - paragraph '0043!; figures 1,7,8	1,5,6,8, 9,13,14, 16
X	US 2003/051495 A1 (OHTA HIROMI ET AL) 20 March 2003 (2003-03-20) paragraph '0044! - paragraph '0051!; figures 1,3	1-4,7, 9-12,15
A	US 2001/025500 A1 (BASCOBERT RENE F) 4 October 2001 (2001-10-04) paragraph '0033!	5,6,13, 14
A	US 2002/023451 A1 (KURODA YASUTAKA ET AL) 28 February 2002 (2002-02-28) paragraphs '0047!, '0078!	8,16

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- *G* document member of the same patent family

Date of the actual completion of the international search

2 March 2005

Date of mailing of the international search report

15/03/2005

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Authorized officer

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT, JP2004/019271

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 1095804	A	02-05-2001	JP 2001133053 A	18-05-2001
			EP 1095804 A2	02-05-2001
			US 6481227 B1	19-11-2002
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			DE 10242900 A1	24-04-2003
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			US 5836429 A	17-11-1998
			CA 2210790 A1	27-07-1998
			EP 0855297 A2	29-07-1998
			JP 10203154 A	04-08-1998
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			US 2001010158 A1	02-08-2001
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			DE 10141592 A1	14-03-2002
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